

## **RHAP Pharmaceutical Coverage**

### **Pharmaceutical Coverage Summary**

For parasitic infections:

Albendazole/Albenza  
Furazolidone/Furoxone  
Iodoquinol/Yodoxin  
Ivermectin/Stromectol  
Mebendazole/Vermox  
Metronidazole/Flagyl  
Paromomycin/Humatin  
Praziquantel/Biltricide  
Thiabendazole/Mintezol

For other infections:

Amoxicillin  
Azithromycin  
Benzithine Penicillin G  
Cefixime  
Ceftriaxone  
Clotrimazole  
Erythromycin ES  
Griseofulvin V (microsize)  
Neomycin/PolymixinB/Hydrocortisone  
Penicillin VK  
Permethrin 1%  
Permethrin 5%  
Trimethoprim-Sulfamethoxazole

### **Notes on Treatment of Parasites:**

**Note:** Patients with *Ascaris* as well as another parasite should always be treated for *Ascaris* first due to the risk of migration of the worm.

**Note:** Albendazole is only available as a film-coated tablet and may not be suitable for use in young children.

**Note:** Paromomycin is not absorbed and may be useful for treatment of amebiasis and giardiasis during pregnancy.

**Note:** Clinicians may consider empiric treatment of refugees with negative O & P tests in the following situations:

1. Multiple family members with similar intestinal parasites. For example, if two family members have trichuriasis, the clinician may consider treating the patient with mebendazole or albendazole.
2. A patient (from a country with endemic parasitoses) with a high-risk medical condition which predisposes to complications from parasitoses. For example, a patient with asthma or rheumatic disease who may be likely to be placed on steroids, or a patient with HIV infection. In these instances, the clinician should consider empiric treatment with albendazole, 400 mg bid for 3 days.

The following table summarizes the pharmaceuticals now covered by RIHP in addition to the anti-parasitic medications specified in the RHAP clinical manual. Clinicians must adhere to the pharmaceutical guidelines listed below. Dosing, if not delineated below, is expected to be according to the standard regimen for the drug.

For drug substitutions, clinicians must seek prior approval from the RIHP medical director; however, clinicians may substitute without RIHP authorization for refugee patients who have received their MassHealth cards. In this case, affiliated pharmacies must seek reimbursement for substituted drugs from MassHealth, not RIHP.

Diagnosis	Children	Adolescents/Adults
Urinary Tract Infection	<ul style="list-style-type: none"> <li>TMP/SMX suspension</li> <li>7 – 10 day course</li> <li>Use Amox. if sulfa allergy</li> <li>May substitute other drug without RIHP approval only if indicated by bacterial sensitivities or allergies†</li> </ul>	<ul style="list-style-type: none"> <li>TMP/SMX 80/160mg tabs</li> <li>3 day course</li> <li>Use Amox. if sulfa allergy</li> <li>May substitute other drug without RIHP approval only if indicated by bacterial sensitivities or allergies†</li> </ul>
Acute Otitis Media	<ul style="list-style-type: none"> <li>Amoxicillin 250mg/5cc suspension</li> <li>Under 2 years: ~20 – 25 mg/kg dose po tid for 10 days</li> <li>2 years and over: 7 days</li> <li>Azithromycin if PCN allergy</li> </ul>	<ul style="list-style-type: none"> <li>Amoxicillin 500mg tabs</li> <li>5 -- 7 day course</li> <li>Use azithromycin if PCN allergy</li> </ul>
Acute Otitis Externa	<ul style="list-style-type: none"> <li>Neomycin/Polymixin B/ Hydrocortisone otic suspension</li> </ul>	<ul style="list-style-type: none"> <li>Same</li> </ul>
Streptococcal Pharyngitis	<ul style="list-style-type: none"> <li>Penicillin VK 250mg/5cc suspension</li> <li>BID dosing preferred</li> <li>10 day course</li> <li>Use erythromycin ES if PCN allergy</li> </ul>	<ul style="list-style-type: none"> <li>Penicillin VK 500mg tabs</li> <li>BID dosing preferred</li> <li>10 day course</li> <li>Use erythromycin ES if PCN allergy</li> </ul>
Gonococcal urethritis/cervicitis	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Single dose cefixime (400 mg po) or ceftriaxone (125 mg IM)</li> </ul>
Chlamydia urethritis/cervicitis	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Single dose azithromycin (1 gm po)</li> </ul>
Syphilis	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Benzathine Penicillin G 2.4 million units IM once; MDPH recommends a second dose for Tx of early latent syphilis. A third dose should be considered for latent syphilis of unknown duration. Doses should be one week apart.</li> </ul>
Tinea Corporis	<ul style="list-style-type: none"> <li>Clotrimazole cream</li> </ul>	<ul style="list-style-type: none"> <li>Clotrimazole cream</li> </ul>
Tinea Capitis	<ul style="list-style-type: none"> <li>Griseofulvin V microsize 125mg/5cc suspension</li> <li>4 weeks course only</li> </ul>	<ul style="list-style-type: none"> <li>Griseofulvin V microsize 250/500mg tabs</li> <li>4 weeks course only</li> </ul>
Lice	<ul style="list-style-type: none"> <li>Permethrin 1% cream rinse</li> </ul>	<ul style="list-style-type: none"> <li>Permethrin 1% cream rinse</li> </ul>
Scabies	<ul style="list-style-type: none"> <li>Permethrin 5% lotion</li> </ul>	<ul style="list-style-type: none"> <li>Permethrin 5% lotion</li> </ul>

†RIHP may request documentation of need for substitution.

## RECOMMENDED AND REIMBURSED DRUGS FOR MAJOR PARASITES\*

Parasite	Drug (generic/trade)	Adult Dosage	Pediatric Dosage
	<b>In Order of Preference:</b>		
<i>Ascaris</i>	Mebendazole/Vermox	500 mg once or 100mg bid x 3d.	Same
	Albendazole/Albenza	400 mg once	Same
<i>Clonorchis</i>	Praziquantel/Biltricide	25 mg/kg q 6° x 3 doses	Same
	Albendazole/Albenza	10 mg/kg x 7 days	Same
<i>E. histolytica</i> <sup>1</sup>	Paromomycin/Humatin	25-35 mg/kg/day ÷ tid x 7 days	Same
	Iodoquinol	650 mg tid x 20 days	30-40 mg/kg/day ÷ tid x 20 days (max. 2 gm)
<i>Giardia</i>	Metronidazole/Flagyl	250 mg tid x 5 days	15 mg/kg/day ÷ tid x 5 d.
	Furazolidone/Furoxone	100 mg qid x 7 days	5 mg/kg/day ÷ qid x 7d.
Hookworm	Mebendazole/Vermox	500 mg once or 100mg bid x 3d.	Same
	Albendazole/Albenza	400 mg once	Same
<i>Hymenolepis</i>	Praziquantel/Biltricide	25 mg/kg x 1 dose	Same
Lice	Permethrin 1% cream rinse/Nix	Apply x 1; repeat after 2 wks prn	Same
Scabies	Permethrin 5% lotion/Elimate	Apply qhs and rinse in AM once	Same
<i>Schistosoma</i>	Praziquantel/Biltricide	20 mg/kg bid-tid x 1 day <sup>2</sup>	Same
<i>Strongyloides</i>	Ivermectin/Stromectol <sup>3</sup>	200 µg/kg/day x 1-2 days	Same
	Thiabendazole/Mintezol	25 mg/kg bid x 7 days	
Tape worms <sup>4</sup>	Praziquantel/Biltricide	5-10 mg/kg x 1 dose	Same
<i>Toxocara canis</i>	Albendazole/Albenza	400 mg bid x 5 days	Same
	Mebendazole/Vermox	100-200 mg bid x 5 days	Same
<i>Trichuris</i>	Mebendazole/Vermox	500mg once or 100mg bid x 3d.	Same
	Albendazole/Albenza	400 mg once <sup>5</sup>	Same

\*The Medical Letter on Drugs and Therapeutics. March 2000 On-line edition:1-12.

<sup>1</sup> Asymptomatic carriage only. Obtain consultation for symptomatic case treatment.

<sup>2</sup> TID dosing for *S. Japonicum* and *mekongi*.

<sup>3</sup> Ivermectin not FDA approved for use in disseminated strongyloidiasis.

<sup>4</sup> *Diphyllobothrium latum*, *Taenia saginata/solium*, and *Dipylidium* only. Consult reference for others.

<sup>5</sup> In heavy infection, may need to treat with 400 mg bid x 3 days.

## FORMULATIONS:

- Albendazole/Albenza: 200 mg film-coated tablets
- Furazolidone/Furoxone: 100 mg tablets, 50 mg/15 cc (16.67 mg/5cc) suspension
- Iodoquinol/Yodoxin: 210 and 650 mg tablets
- Ivermectin/Stromectol: 3 mg unscored and 6 mg scored tablets
- Mebendazole/Vermox: 100 mg chewable tablets
- Metronidazole/Flagyl: 250 & 500 mg tablets, 100 mg/5cc suspension (specially prepared)
- Paromomycin/Humatin: 250 mg capsules
- Permethrin/Elimate/Nix: 5% cream (60gm) /1% cream rinse (59cc)
- Praziquantel/Biltricide: 600 mg triscored tablets, 150 mg/section
- Thiabendazole/Mintezol: 500 mg chewable tablets, 500mg/5cc suspension

## MAJOR SIDE EFFECTS\*:

Drug	Common	Rare
Albendazole	Abd. pain, reversible alopecia, transaminase elevation, <i>Ascaris</i> migration,	Leukopenia, rash, renal toxicity
Furazolidone	nausea, vomiting, , headache, allergic rxns, hypoglycemia	disulfiram-like rxn, MAOI interactions, hemolysis with G6PD deficiency, polyneuritis
Iodoquinol	Rash, acne, goiter, nausea, anal pruritus, diarrhea, cramps	Optic neuritis/atrophy, loss of vision, peripheral neuropathy, iodine sensitivity
Ivermectin	Mazzotti-type reaction in onchocerciasis: fever, pruritus, lymphadenopathy, HA, arthralgia	Hypotension, edema, tachycardia, possible ophtho changes
Mebendazole	diarrhea, abd. pain, <i>Ascaris</i> migration	leukopenia, alopecia, hepatotoxicity, agranulocytosis, hypospermia
Metronidazole	nausea, dry mouth, metallic taste, headache, GI disturbance, insomnia, vertigo, tinnitus, weakness, stomatitis, dark urine, disulfiram-like rxn., paresthesia, rash, urethritis	seizures, encephalopathy, pseudomemb.colitis, ataxia, leukopenia, pancreatitis, periph. Neuropathy
Paromomycin	GI disturbance, eighth nerve toxicity, nephrotoxicity if IV, vertigo, pancreatitis (No rare SE's listed).	
Permethrin	Burning, stinging, numbness, increased pruritus, edema, erythema, rash (No rare SE's listed).	
Praziquantel	malaise, headache, dizziness, sedation, GI upset, fever, sweating, nausea, eosinophilia, fatigue	Pruritus, rash
Thiabendazole	Nausea, vomiting, vertigo, headache, drowsiness, pruritus, leukopenia, crystalluria, rash, hallucinations and psych. rxns, visual/olfactory disturbance, e. multiforme	Shock, tinnitus, intrahepatic cholestasis, seizures, angioneurotic edema, Stevens-Johnson Syndrome

\*This table is not meant to be a definitive list of side effects and contraindications. Clinicians are responsible for familiarizing themselves with prescribed anti-parasitic drugs.